

General Offices/3M

3M Center
St. Paul, Minnesota 55144-1000
(612) 733-1110

MATERIAL SAFETY
DATA SHEET



DIVISION: ADHESIVES, COATINGS AND SEALERS
TRADE NAME: EC-1252 White
3M I.D. NUMBER: 62-1926-0340-5 62-1926-2640-6
ISSUED: JUNE 30, 1987
SUPERSEDES: SEPTEMBER 23, 1986
DOCUMENT: 10-8618-0

1. INGREDIENTS	C.A.S. NO.	PERCENT	EXPOSURE LIMITS
synthetic rubber	N/A		N/D 5
phenolic resin and epoxy resin	N/A		N/D 5
chlorinated paraffin and salicylic acid	N/A		N/D 5
bis-tributyltin-n-octyl succinate	67701-37-5		N/D 5
mica	N/A		N/D 5
calcium carbonate	1317-65-3		10 mg/m3 1
titanium dioxide	13463-67-7		10 mg/m3 1
zinc oxide	1314-13-2		10 mg/m3 1
TOTAL OF THE ABOVE	N/A	70.0	N/D 5
methyl ethyl ketone (MEK)	78-93-3	26.0	200 ppm 1
antimony trioxide	1309-64-4	4.0	.5 mg/m3 Sb 1

SOURCE OF EXPOSURE LIMIT DATA:

1. ACGIH Threshold Limit Values
2. Federal OSHA Permissible Exposure Limit
3. 3M Exposure Guidelines
4. Chemical Manufacturer Recommended Guidelines
5. None Established

ABBREVIATIONS:

N/D - Not Determined
N/A - Not Applicable

2. PHYSICAL DATA	
BOILING POINT:	176F (MEK)
VAPOR PRESSURE:	368F 80 mm
VAPOR DENSITY (Air=1):	2.5
EVAPORATION RATE (Ether=1):	2.7
APPEARANCE AND ODOR:	White paste, solvent odor
SOLUBILITY IN WATER:	Slight
SP. GRAVITY (Water=1):	1.5
PERCENT VOLATILE:	26
VISCOSITY:	200-1,000 cps
pH:	N/A

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3. FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (Closed Cup): 20F
FLAMMABLE LIMITS - LEL: 1.8 UEL: 11.5

EXTINGUISHING MEDIA:

CO2, foam, dry chemical, water

SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Extremely flammable. Overheated, closed containers adjacent to fire could explode due to pressure buildup.

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4. REACTIVITY DATA

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STABILITY: STABLE

INCOMPATIBILITY - MATERIALS TO AVOID:

N/A

HAZARDOUS POLYMERIZATION: MAY NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:

CO, CO2, Sb2O4, Sb2O5 and smoke particles.

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5. ENVIRONMENTAL INFORMATION

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SPILL RESPONSE:

Observe precautions in all sections. Extinguish all ignition sources. Collect spilled material, cleanup residue and store in closed metal container (U.S. Dept. of Transportation approved if waste will be shipped).

RECOMMENDED DISPOSAL:

Commercial incineration with destruction and removal efficiency greater than 99.99% or reclamation is preferred. Otherwise, dispose in accordance with local and current regulations or authorities. U.S. EPA Hazardous Waste Number: D001 (Ignitable).

ENVIRONMENTAL DATA:

VOC: 399 grams/liter maximum Volatile Organic Compound.

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6. SUGGESTED FIRST AID

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EYE CONTACT:
Immediately flush eyes with plenty of water for at least 10 minutes.
Call a physician.

SKIN CONTACT:
Wash with soap and water.

INHALATION:
Provide fresh air. If not breathing, give artificial respiration.
Call a physician.

IF SWALLOWED:
Do not induce vomiting. Drink two glasses of milk or water. Call a
physician. Do not give liquids to an unconscious person.

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7. PRECAUTIONARY INFORMATION

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Keep product and its vapors away from heat, sparks, flame and other
sources of ignition. Use only in areas with ventilation sufficient
to maintain concentrations of material below recommended exposure
limits. Avoid prolonged breathing of vapors. Avoid eye and skin
contact; wear safety glasses and impervious gloves when handling
product. Keep container closed when not in use. Keep out of the
reach of children.

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8. HEALTH HAZARD DATA

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EYE CONTACT: Liquid and vapor may cause eye irritation.

SKIN CONTACT: May cause skin irritation on prolonged or repeated contact.

INHALATION: Vapor overexposure may cause respiratory system irritation and light-headedness. Methyl ethyl Ketone (MEK) is a potential embryo/fetotoxin based on laboratory animal studies. There is no evidence of reproductive effects associated with human exposure to methyl ethyl ketone (MEK). Symptoms of overexposure include headache, dizziness, weakness, fatigue, and on extreme overexposure, unconsciousness.

INGESTION: May cause digestive system irritation and light-headedness. Symptoms of ingestion may include nausea and vomiting. Solvent aspiration into the lungs may cause lung damage or, in the extreme, death.

NOTE: Antimony trioxide has been found to cause cancer in laboratory animal studies. Antimony trioxide is bound in this product so exposure by inhalation is not expected.

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

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MATERIAL SAFETY
DATA SHEET



DIVISION: ADHESIVES, COATINGS AND SEALERS
TRADE NAME: SCOTCH-GRIP(TM) 1300 Rubber and Gasket
Adhesive

3M I.D. NUMBER: 62-1300-0635-6 62-1300-2631-3 62-1300-5530-4
62-1300-6530-3 62-1300-7530-2 62-1300-8530-1
62-1300-9530-0

ISSUED: MARCH 23, 1987
SUPERSEDES: JANUARY 13, 1986
DOCUMENT: 10-2794-5

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1. INGREDIENTS	C.A.S. NO.	PERCENT	EXPOSURE LIMITS
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polychloroprene rubber	N/D	10.0- 20.0	N/D 5
magnesium resinate	N/D	20.0- 30.0	N/D 5
aliphatic petroleum distillate*	8030-30-6	20.0- 30.0	400 ppm 1
*contains 23% n-hexane	110-54-3	1.0- 10.0	50 ppm 1
toluene	108-88-3	1.0- 10.0	100 ppm 1
methyl ethyl ketone (MEK)	78-93-3	20.0- 30.0	200 ppm 1

- SOURCE OF EXPOSURE LIMIT DATA:
1. ACGIH Threshold Limit Values
 2. Federal OSHA Permissible Exposure Limit
 3. 3M Exposure Guidelines
 4. Chemical Manufacturer Recommended Guidelines
 5. None Established
- ABBREVIATIONS:
N/D - Not Determined
N/A - Not Applicable

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2. PHYSICAL DATA	
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BOILING POINT:	140F
VAPOR PRESSURE:	368F 120 mm
VAPOR DENSITY (Air=1):	>2.5
EVAPORATION RATE (Ether=1):	2+
APPEARANCE AND ODOR:	Yellow, low viscosity liquid - solvent odor.
SOLUBILITY IN WATER:	Low
SP. GRAVITY (Water=1):	0.88
PERCENT VOLATILE:	62
VISCOSITY:	13-2600 Centistokes
pH:	N/D

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3. FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (Closed Cup): -14F

FLAMMABLE LIMITS - LEL: 1.0 UEL: 11.5

EXTINGUISHING MEDIA:

CO2, foam, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Extremely Flammable. Overheated, closed containers adjacent to fire could explode due to pressure buildup.

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4. REACTIVITY DATA

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STABILITY: STABLE

INCOMPATIBILITY - MATERIALS TO AVOID:

Oxidizers

HAZARDOUS POLYMERIZATION: MAY NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition or burning may produce CO, CO2, HCl and other chlorinated compounds.

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5. ENVIRONMENTAL INFORMATION

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SPILL RESPONSE:

Observe precautions in other sections. Extinguish all sources of ignition in the area. Ventilate area. Collect spilled material using absorbent as necessary. Place in a U.S. Dept. of Transportation approved metal container and seal.

RECOMMENDED DISPOSAL:

Commercial incineration with destruction and removal efficiency greater than 99.99% or reclamation is preferred. If incinerated, more than 99% of the hydrogen chloride in exhaust gas should be removed. Otherwise, dispose in accordance with applicable regulations or authorities.

U.S. EPA Hazardous Waste Number: D001 (Ignitable).

ENVIRONMENTAL DATA:

N/D

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6. SUGGESTED FIRST AID

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EYE CONTACT:

Flush eyes with large amounts of water for at least 10 minutes. Call a physician.

SKIN CONTACT:

Wash affected area with soap and water.

INHALATION:

Move person to uncontaminated air. If breathing has stopped, immediately begin artificial resuscitation and send for medical assistance.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of milk or water. Call a physician or poison control center. If spontaneous vomiting should occur, lower person's head below the hips to prevent aspiration into the lungs. (Do not give liquids to an unconscious person.)

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7. PRECAUTIONARY INFORMATION

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Keep product and its vapor away from heat, sparks, flame and other sources of ignition. The vapors released by this product can easily be ignited. Use only in areas with sufficient ventilation to maintain vapor concentrations below the recommended exposure limits. Avoid eye and skin contact; wear chemical goggles or safety glasses and impervious gloves when handling product. Avoid prolonged breathing of vapors. Keep container closed when not in use. Keep out of the reach of children.

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8. HEALTH HAZARD DATA

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EYE CONTACT: Liquid and vapor may cause eye irritation. Symptoms may include tearing, redness and blurred vision.

SKIN CONTACT: Acute exposure is mildly irritating. Prolonged or repeated contact will produce defatting and resultant dermatitis.

INHALATION: Vapor overexposure may cause respiratory system irritation and temporary nervous system impairment (light-headedness). Symptoms may include drowsiness, light-headedness, dizziness, nausea and headache. Repeated or extreme overexposure to toluene vapors or n-hexane may cause nervous system damage. Symptoms may include: depression, facial numbness, visual disorders, giddiness and anemia.

INGESTION: May cause digestive system irritation and nervous system impairment (light-headedness). Symptoms may include nausea, vomiting and diarrhea. Solvent aspiration into the lungs as a result of vomiting may cause lung damage or death.

NOTE: Methyl ethyl ketone (MEK) has caused embryotoxic effects when fed in high doses to laboratory animals. There is no evidence of reproductive effects associated with human exposure to methyl ethyl ketone (MEK).

ADDITIONAL EXPOSURE LIMITS: petroleum distillates: 500 ppm TWA (OSHA); n-hexane: 500 ppm TWA (OSHA); toluene: 150 ppm STEL (ACGIH), 300 ppm Ceiling (OSHA), 200 ppm TWA (OSHA), 500 ppm STEL (OSHA), 200 ppm Ceiling (NIOSH), 100 ppm TWA (NIOSH); methyl ethyl ketone: 300 ppm STEL (ACGIH), 590 mg/kg TWA (NIOSH).

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Technical Data

Dated: August 1, 1984

Supersedes previous product
data for Scotch-Grip Brand
Rubber Adhesives 1300,
1300-L and 3M Adhesive 1362

Rubber and Gasket Adhesives 1300 1300-L 1300 Roll Coatable

Description:

- These synthetic elastomer base adhesives are designed for spray or brush applications. Develop high immediate strength, have excellent heat resistance; temperature performance range is from -5°F. to 300°F. Scotch-Grip 1300-L meets specification requirements of MMM-A-121.
- These adhesives bond Neoprene, reclaim, SB-R and butyl rubber to metal, wood, most plastics and many other substrates.
- 1300-L is a lower solids version of 1300.
- 1300 Roll Coatable is a "slow drying" product variation which allows for roll coating application.

Typical Physical Properties:

Product	Color	Viscosity* (cps) (Approx.)	Solids Content By Wt.	Net Wt. Lbs./Gal. (Approx.)	Flash Point (c.c.)	Coverage Sq. Ft./Gal. (1 Mil Dry Film)	Solvent**	Bonding Range (10 Mil Wet Film, 2 Surfaces)
1300	Yellow	2400	37%	7.3	-14°F.	396	Petroleum Distillate Methyl Ethyl Ketone (MEK) & Toluene	Up to 12 Minutes
1300-L	Yellow	500	29%	7.1	-14°F.	300	Petroleum Distillate Methyl Ethyl Ketone (MEK) & Toluene	Up to 8 Minutes
1300 Roll Coatable	Yellow	2400	32%	8.2	40°F.	434	Toluene & Ethyl Alcohol	Up to 15 Minutes

*Brookfield Viscometer RVF # 4 sp @ 20 rpm.

**These products contain non-photochemically reactive solvent, Southern California APCD Rule 102 (1-9-76).

Equipment Suggestions:

Scotch-Grip Rubber and Gasket Adhesive 1300-L

Production Type Spray Equipment 2:1 Pump (Divorced Design)

Spray Gun	Air Cap	Fluid Tip	Air Pressure	Approximate Air Requirement ¹	Fluid Flow ²
DeVilbiss JGA, JGK or AGB	704	FX	70 psi	17 CFM	5 fl. oz./min.
Binks No. 62 No. 18 or No. 61	63PH	63B	70 psi	21 CFM	6½ fl. oz./min.

These adhesives are not recommended for Airless Spraying.

¹3 H.P. Compressor for intermittent use.

5 H.P. Compressor for continuous use.

²To Measure Fluid Flow: Pressurize fluid source only; pull trigger; flow material into measuring device for 60 seconds; increase or decrease fluid source pressure to obtain desired fluid flow.

All material hoses should be nylon or PVA lined. Packings and glands in contact with these adhesives should be made of Teflon.

Scotch-Grip Rubber and Gasket Adhesive 1300

5 Gallon Pail Dispensing System:

1. Pump—4:1 double acting ball type check pump, 4 cu. in./cycle 3" air motor.
2. Pail Cover required to reduce solvent loss.

55 Gallon Drum Dispensing System:

1. Pump—4:1 ratio double acting ball type check pump, 4 cu. in./cycle 3" air motor, bung style pump.

Accessories:

1. Hose—Samuel Moore Synflex hose or equivalent, 500 psi working pressure minimum.

Chemical Resistance Requirements:

1. Synthetic materials in contact with this adhesive must be resistant to ketones and aromatic solvents. Compar, nylon and Teflon are suggested.

Directions For Use:

Scotch-Grip Rubber and Gasket Adhesives 1300 & 1300-L

Surface Preparation: Surfaces must be clean, dry and dust free. Wiping with Scotch-Grip Brand Solvent No. 3 will aid in removing oil and dirt. For best results, temperature of adhesives and surfaces should be at least 65°F. If stored below 30°F., warm up, followed by thorough agitation may be required.

Application: Stir well before using. Brush or flow a thin, uniform coat of adhesive on each surface. Allow adhesive to dry until tacky (maximum dry time about 4 minutes). Assemble materials with sufficient pressure to insure contact.

Drying Time: Bonded parts have high immediate strength to facilitate normal handling.

Cleanup: Excess adhesive may be removed with methyl ethyl ketone*, toluol*, or Scotch-Grip Brand Solvent No. 2* or 3*.

Reactivation: Greater immediate strength may be obtained by solvent reactivation. To solvent reactivate, coat both surfaces with adhesive. Allow to dry tack-free. *Lightly* wipe one surface with methyl ethyl ketone*. Complete bond within 30 seconds.

***NOTE:** When using solvents, extinguish ignition sources and observe proper precautionary measures for handling such materials.

1300 Roll Coatable

For equipment recommendations and directions for use of 1300 Roll Coatable, consult your 3M Industrial Adhesives Sales Representative.

Performance Characteristics:

180° Peel Strength Canvas/Steel			Overlap Shear Strength 1/8" Birch/1/8" Birch	
Time @ 75°F.	Test Temp.	Value (lbs./in. width) 1300, 1300-L and 1300 Roll Coatable	Test Temp.	Value (psi) 1300, 1300-L and 1300 Roll Coatable
1 day	75°F.	18	-30°F.	343
3 days	75°F.	48	75°F.	549
5 days	75°F.	51	150°F.	195
7 days	75°F.	52	180°F.	136
2 wk.	75°F.	30	200°F.	85
3 wk.	75°F.	20	225°F.	85
after 3 wk.	30°F.	49		
after 3 wk.	150°F.	32.5		
after 3 wk.	180°F.	26		

All test data reported represent the typical average obtained using the testing procedures described. The typical range, where applicable represents the range in average values that can be expected on multiple lots of material.

The data reported portray typical product performance and are not intended to be used for specification limits. Establishment of specification limits, certification requirements, and the test procedures involved must be reviewed and approved by 3M.

Storage and Handling:

Scotch-Grip Rubber and Gasket Adhesives 1300, 1300-L and 1300 Roll Coatable

Store products at 60°-80°F. for maximum storage life. Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. Rotate stock on a "first in-first out" basis. Upon request, your 3M Adhesives, Coatings and Sealers Sales Representative will be pleased to advise you of the anticipated shelf life of these products under the storage conditions in your plant.

Cleanup can be accomplished with Scotch-Grip Brand Solvent No. 2. When using solvents, extinguish all sources of ignition in the area and observe proper precautionary measures for handling such materials.

Shipping Information:

National Motor Freight Classification: Adhesives, NOI. The following information is provided to help you determine the proper packaging, labeling and marking in accordance with hazardous materials regulations.

D.O.T. Proper Shipping Name: Adhesives

D.O.T. Hazard Classification: Flammable Liquid, UN1133

Technical Name of Hazardous Ingredient: Petroleum Distillate (1300 & 1300-L) Toluene (1300 Roll Coatable)

Flash Point: -14°F (1300 & 1300-L) 40°F (1300 Roll Coatable)

Precautionary Information:

Scotch-Grip Rubber and Gasket Adhesives 1300 & 1300-L

DANGER. EXTREMELY FLAMMABLE.

The Vapors Released By This Product Can Easily Be Ignited.

Contains petroleum distillate, methyl ethyl ketone (MEK) and toluene.

Precautions: Keep product and its vapors away from heat, sparks and open flames. Use only in areas adequately ventilated with enough air movement to remove vapors and prevent vapor buildup. Avoid prolonged breathing of vapor. Avoid contact with eyes and skin. Keep container closed when not in use. **Keep out of reach of children.**

Suggested First Aid: **Eye contact:** Immediately flush eyes with plenty of water for at least 10 minutes and call a physician. **If swallowed:** Do not induce vomiting; immediately call a physician.

Scotch-Grip Rubber and Gasket Adhesive 1300 Roll Coatable

WARNING. FLAMMABLE. VAPOR HARMFUL. IRRITATING TO EYES AND SKIN. Contains toluene and ethyl alcohol.

Precautions: Keep product and its vapors away from heat, sparks and open flames. Use only in areas adequately ventilated with enough air movement to remove vapors and prevent vapor buildup. Avoid breathing vapor. Prevent contact with eyes and skin. Keep container closed when not in use. **Keep out of reach of children.**

Suggested First Aid: **Eye contact:** Immediately flush eyes with plenty of water for at least 10 minutes and call a physician. **If swallowed:** Do not induce vomiting; immediately call a physician. **Respiratory difficulty:** Provide fresh air and call a physician. **Skin contact:** Wash with soap and water.



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Important Notice To Purchaser:

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied.

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith.

No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

Z-1300RGA

Adhesives, Coatings & Sealers Division/3M

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St. Paul, MN 55144

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